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VOLUME XXVII

NUMBER TEN

The Agricultural Student



1885

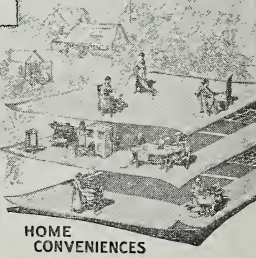
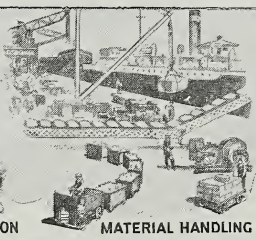
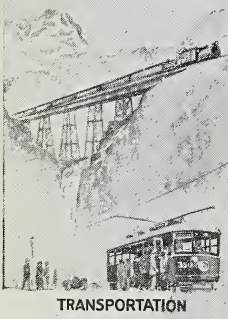
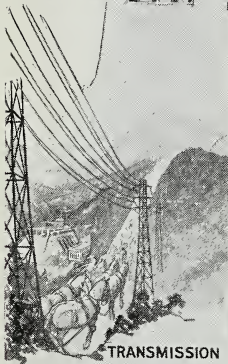
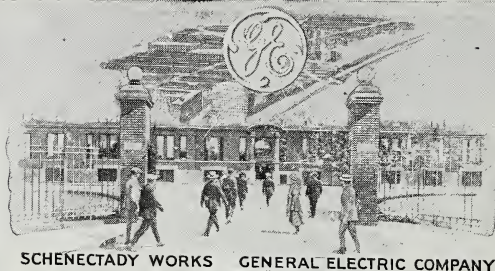
"BOOST OHIO"
NUMBER



JUNE, 1921

TWENTY CENTS

ONE FIFTY THE YEAR



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IN the rush of present-day living, very few of us ever stop for a moment to sum up the benefits of modern civilization or to contrast them with past inconveniences.

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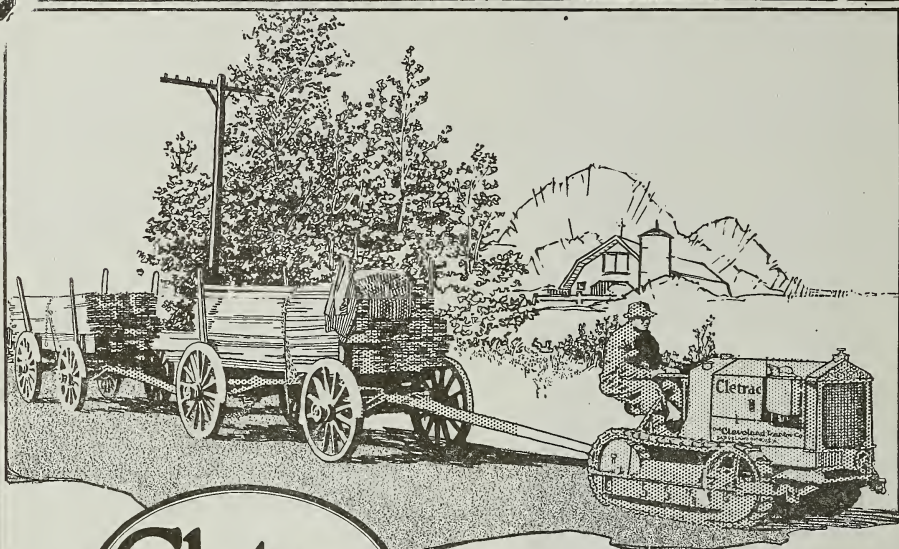
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The Agricultural Student

VOL. XXVII

OHIO STATE UNIVERSITY, COLUMBUS, OHIO, JUNE, 1921

No. 10

SHALL I GO TO COLLEGE?

By GEO. F. JOHNSON, Special Staff Writer, Indiana Farmer's Guide.

"I am convinced that far too many boys go to college. It is not that I undervalue the worth of a college education—far from it—but too many fellows go who have no appreciation of what a college education means, no special interest, no impelling motive, no desire for what college gives."—Thomas A. Clark, Dean of Men, University of Illinois.

NOT long ago I received a letter from Lester, a friend, who is graduating from high school this spring. It was a long letter telling of his desires, his problems and his circumstances. He wanted me to answer this one big question for him: "Shall I go to college?"

Lester is ambitious and energetic but not what you would call an exceptionally bright fellow. He made a good record in high school but had to study hard to do it. He is not free of the financial problem. His parents are not well-to-do. In fact they must economize in order to keep up their average-sized farm and keep the younger children in school. They want Lester to get a college education but feel that he must largely earn his own way. In part Lester wrote: "I have no money on hand except what I can earn and save this summer. Do you feel that it is wise to enter college on this small reserve and depend upon getting odd jobs to keep me going through the year? I have heard a great deal about college fraternities. Would you advise me in my circumstances to accept a pledge to one during my first year? You remember Dick Tucker and Joe

Campbell over at the county seat. They have been to college for a year and they say it is a great life and they want me to be sure to come next fall. I am anxious to know what you would do if you were in my shoes."

Undoubtedly there are several thousand farm boys in Ohio who have Lester's problems before them. Not all will have the same things to consider, not all will have the same questions confronting them but all must come to some definite conclusion before fall.

Shall I go to college? No boy graduating from high school this spring should have the question answered for him. No parent should definitely decide it. No friend should attempt it. I didn't answer the question for Lester but I did tell him frankly that too many fellows were going to college these days just because Dick Tucker and Joe Campbell said that it was a great life. This influence lowers the morale of any institution. Fellows that go to have a good time lack special interest and have no desire for what college gives. Thomas A. Clark, dean of men at the University of Illinois, comes to this conclusion after years of observation: "I am convinced that far too

many boys go to college. It is not that I undervalue the worth of a college education—far from it—but too many fellows go who have no appreciation of what a college education means, no special interest, no impelling motive, no desire for what college gives.”

In contrast to a few decades ago, it seems that going to college is getting to be the custom of the time much as enlisting in the army was the custom in 1917. As a result the state institutions of this country are flooded. This would appear as a wholesome tendency if it were not for the indifference that characterizes a portion of each student body. The result has been the greatest epidemic of flunks, higher education has ever experienced in this country. One institution with an enrollment of 7,000 reported that 70 per cent of the students failed or were conditioned in at least one study. This is unusual, without precedent in fact, and just who is to blame is debatable but undoubtedly the lack of sincerity and earnestness on the part of certain members of the student body is a factor. Unless one has a better reason for going to college than the fact that a friend has gone and reports, “it’s a great life,” he had better not go, for all the available teaching force and equipment is needed for the men and women who have a special desire for the education that college gives.

Is it wise to enter college on a small fund and expect to work one’s way through? Fellows have entered college with less than \$50 in available cash and have successfully completed a four-year course without outside financial assistance. Cases of this kind are exceptional, however. Of the fellows with average ability and no special talent and training, but few have the en-

durance and perseverance to dig along four long years with poverty always next door neighbor. On the other hand, the fellow with special talent such as a musician or with special training such as a typist or typesetter can make his way without the difficulties that beset the boy who must work at muscular labor for 20 to 30 cents per hour. For the boy who has no special talent and has less than half the amount of money that will be required to carry him through the year (the expense of one year will vary between \$400 and \$600 depending upon the economy exercised) it seems that the best advice is to delay entering for at least one year and instead get a job if possible in the line of work which is expected to be followed in school. Learn and earn as much as possible and by all means save to the limit. The amount saved will help the next year and the habit of saving developed will help for several years to follow.

Shall the fellow with limited means accept a pledge to a fraternity during the first year? My suggestion is that you make your own fraternity during at least the first year. Become acquainted with your classmates. Cultivate friendship. Take part in college activities. Join the Y. M. C. A. and other student organizations. Learn to extend your acquaintance as far as possible. I have heard alumni was from the contact with fellow students. By all means learn to know your instructors, not to be their “pet”—far from it—but so you will feel free and at ease to discuss questions and problems with them. After all college professors are human folks just like the rest of us but often a freshman does not discover this until he is a sophomore.

There is another aspect of this going

(Continued on page 490)

HOW FAR CAN PRODUCERS PROFITABLY GO?

By H. E. ERDMAN, Assistant Professor in Rural Economics.

JUST now much is expected of our various farm organizations in the way of reorganizing our marketing machinery. It is true enough that our present marketing system is more or less cumbersome and that readjustments take place all too slowly as between different parts of the system. Few advocates of farmers' organizations, however, would go so far as to recommend that producers of farm products bridge the entire gap between themselves and the consumers of their products. Just how far organized effort may carry the various products varies with the nature of the product and of the people producing it. This question can be considered more understandingly if we first group the various functions which our present marketing system—or any proposed system—must perform.

Following are some of the more important functions now performed by various agencies concerned in moving the product to the consumer:

1. Assembling at country points.
2. Establishing trade connections.
3. Transportation.
4. Assembling at wholesale centers.
5. Grading.
6. Processing and packaging.
7. Storing.
8. Distributing from wholesale centers.
9. Financing.
10. Assumption of market risks.
11. Retailing.

These eleven functions are not necessarily performed in the above order, nor is every one of them necessarily performed in the case of any given product as it journeys from producer to consumer. For example, some goods

pass almost immediately into consumption without any appreciable period of storage; again, many farm products never pass into the wholesale centers at all, and many never are processed nor packaged in any real sense. All of this is true of apples or potatoes which a farmer hauls in bulk from his field to the city, there peddling from his wagon and delivering into the vessel of the consumer. But in the main these functions have to be performed. How far can producers' organizations profitably go in performing them?

Producers already have shown that they can very profitably take over the first function. Several thousand farmers' elevators, nearly as many livestock shipping associations, some hundreds of fruit and vegetable associations, all demonstrate the fact that farmers can successfully assemble their products at local points. And in this assembling at local points very often functions five and six have also been taken over. For example, at hundreds of local creameries the cream is made into butter or the milk into cheese. The fruit and vegetable associations have graded their products in some cases very carefully, and have neatly packaged them. Skookum apples, Sunkist or Sealsweet oranges, Sunmaid raisins, Marietta (Ohio) tomatoes, all are evidence of success along these lines. Whether the processing and packaging can be taken over by producers with success where it must be done far from home and by expensive and complicated methods may be doubted. At any rate past experience does not give much promise for the future. The meat packing industry is an illustration in point. The same is true of the processing in the case of such raw products as wool, cotton, to-

bacco and perhaps also of wheat, and milk for condensing.

Assembling at wholesale centers is now being done successfully. The large citrus and apple growers' associations, the larger potato growers' associations, the wool growers' associations, and many others, assemble the product at the large markets where they sell it to manufacturers or distributors. In this same connection the storing function is often performed by farmers. Unless, however, the form of organization and plan of operation is such that the risk of price fluctuation is borne by the producers equally, storage may be too risky. For example, where a product is stored and sold in small portions at different times during the year, trouble would arise if a severe price slump oc-

curred in the middle of the year unless all the producers shared the loss through some of the various pooling plans.

Again, to store the product would involve the financing function. How far producers can go along this line the future will doubtless tell. Through adequate and properly supervised warehousing and the use of the warehouse receipt farmers' organizations could doubtless raise money on goods in store at least as readily as can be the present dealers.

Function eight, distributing from wholesale centers, could hardly be taken over by farmers' organizations in very many cases. Neither could producers go into the retailing of their

(Continued on page 490)

CLASS PROJECTS

By E. B. BARKER, '21.

TO consider class projects we must first get an idea of what they are. A class project, as the name implies, is a project carried out by the class as a whole, under the supervision of the teacher. They should not be confused with the pupil's home project which is carried out by one pupil only under the supervision of the instructor.

There is no doubt but what the class project is one form of teaching that should be carried out whenever the opportunity affords itself. In the first place it is something different which is always advisable, provided it is a worth while idea. It tends to keep the interest of the class at the highest peak. It has the advantage of being one type of project where all the class works together. This should make it a little easier to carry out, in that less time is required from each pupil individually, and yet the whole class is closely enough con-

nected with the project that they will derive about as much from it as if they worked it out alone.

A case might be cited which occurred in a small college where the students in the short agricultural course thought that after they had spent about a month upon feeds and feeding that they would try out some of the principles they had learned. They chose as their class project, if we may call it such, the feeding of a few pigs from weaning time till they were finished out. They started the project by figuring out a ration which was balanced all right, but they forgot to consider the cost even though they knew that they would have to buy their feed. After they had fed this ration for a couple of weeks they began checking up and found that the pigs had made satisfactory gains all right, but that the cost was greater than the value of the

gains. Something had to be done. The ration was changed and another trial was made. Upon checking up again they found that this ration was not paying because it was too bulky and the hogs did not eat enough to make satisfactory gains. Another effort was made which was successful enough that they made a little money over their expenses. This is an example of what may come from any class project, and was one that was certainly worth while.

As to just what the project should be it is very hard to tell due to the difference in communities. Only suggestions can be made and then it is up to the teacher to choose those that are applicable. In almost every community there are families of old folks, where all the children have left home, that spend winters south. Many of these people have a cow or a few chickens which they would be more than glad for the class to care for while they are gone. If it can be arranged this makes a very satisfactory project.

Sometimes there are poorly arranged farms which have certain things about them such as streams and woodlots which cannot be changed. If this problem could be given to the class to let them tell how a satisfactory rearrangement should be made, it would be time well spent.

One thing that is common is letting the students make all the plans for a corn show. They could visit all the local merchants and get them to offer the prizes, write up the rules of the show, and take care of the advertising. This would all have to be under the supervision of the teacher but would be very profitable. Not that it would teach the boys how to farm, but that it would develop managing ability and leadership in the boys.

Not infrequently do we find schools

in which there is no course in farm shopwork offered. We have long seen the need for such a course but sometimes we cannot have it given. What substitute could be given that would help fill up this gap in the curriculum? The answer is the class project. There are always farmers in the community who have shopwork jobs such as making gates, building concrete watering tanks, putting up windmills, or overhauling gas and steam engines, and haven't the ability to do it themselves. This is the opportunity for the teacher to arrange for a class project.

From the suggestions already given it may be seen that the field for class projects is almost unlimited. It might be said that it is up to the teacher to keep wide awake and watch his chance and the projects will easily be found.

Some questions might be raised as to just how long the project should be. In answer to this it might be said that it depends entirely upon the type of project. This is a very indefinite answer but it may be seen from the already suggested projects that it is as definite as possible. Some of the suggestions may last practically the whole winter, some may last a month, some a week, and some as short as one day. In general though they should always be made as short as possible because the extra work might become monotonous so that the pupils would consider them as a burden rather than as a privilege.

With these points in view it seems that practically all teachers should see the value of the class project in the course of study and should never shy from the opportunities for organizing them. It is to be hoped that more use of them will be made in the future than has been in the past unless something better presents itself.



OF
OHIO STATE UNIVERSITY
A Medium for Exchange of Ideas Between College and Farm

EDITORIALS

"BOOST OHIO"

In recognition of our indebtedness to that institution which has made our publication a possibility, THE AGRICULTURAL STUDENT greets you in its "Boost Ohio" number. Never before has Ohio had so much to offer as Boost Ohio features in the way of achievements attained and possibilities promised. The oft told story of Ohio's recent glories and triumphs is not the theme of this writing or the issue in which it appears. Instead, the Boost Ohio feature of this magazine is embodied in a brief, but clear resume of the work offered and done by the various departments of the College of Agriculture. An attempt is also made to give briefly the achievements of those men and women who comprise the instructional force of the entire College of Agriculture. In this way we hope to give a clearer and more definite idea of the actual workings of this institution and of those who are in charge. In doing so we will have boosted Ohio by telling what she has to offer and letting the public judge its merit.

—G. W. T.

COLLEGE SCHOOL DAY

Such a day as this should be inaugurated into every high school in the state. The need of such can be appreciated only by actual contact with high school seniors. What does this phrase mean? It means this, that a day in June be set aside for introducing to the graduating class a definite and close knowledge of college, the texts used, courses available and social and athletic life.

A representative or representatives from some college or University could visit the school. In a general lecture or talk he could outline the courses available, showing copies of some of the texts used, questions could be answered, the possibilities of paying one's way thru college could be discussed, in short the young men and women could be made to realize the possibilities of a college course. A short play by some college dramatic organization, a concert by the glee club, a track meet or a ball game could be staged in such

a way as to enthuse the graduating class by allowing them to participate in some minor way.

Here is another way for our University to serve the citizens of the state. A similar plan was tried between high school and grammar school in Litchfield, Conn., with marked success. Why not try it between college and high school of Ohio?

NEXT YEAR

George Timmons will edit the Agricultural Student for the coming year and J. J. Mattus will return as business manager. The present staff has endeavored to give the readers the best without making it too technical nor too elementary. We have tried to meet the demands of all classes of readers or to make it a real medium for the exchange of ideas on modern scientific agriculture. We wish to thank all for their splendid cooperation and aid; at the same time wishing the new staff all possible success in carrying on the ideals and principles upon which this magazine is founded.

ROADS

In traveling across a certain Ohio county which borders on the river an excellent opportunity was afforded the writer to observe the contrasted effect of good roads and bad roads on the appearances of the communities adjoining.

It happened that a state appropriation had made possible an inter-city pike through one side of this county, which, as southern Ohio counties go, was not extremely flat! Elsewhere in the county the roads were of the typical nature which forces the more remote inhabitants to consider going to town, or anywhere in fact, impossible during the rains of early winter or the thaws of spring.

Here was a fine specimen of the "improved roads" of today within a few miles of the worst roads one could expect to find in Ohio. The vicinity of the improved highway was outstandingly characterized by well kept and prosperous looking farms and farmsteads. The remainder of the county was marked by a vast majority of ramshackle farms and bore a general run-down appearance.

Surely the virgin soils of these two portions of one county were not so different as to cause this marked difference in apparent prosperity. Rather the presence of a good road to market had so aided the farmers in the one case and stimulated their community pride that they were, through virtue of this alone, more prosperous than their less fortunate neighbors.

This condition cannot long exist. In Indiana legislation is attempting to cut down on the expenditures for inter-city roads of the hard surfaced and expensive type and throw more of the funds into the establishment of practical crushed stone and gravel roads in all parts of the state. Surely a greater number of tax payers will be benefited by the same amount of money spent. The hard surfaced brick and concrete roads will come in their turn, but first let us make passable those roads for which the farmer has the greatest need.

G. W. T.

FARM CROPS

H. G. DOSTER, Editor.

WHO'S WHO

Mr. J. B. Parks, the present head of the farm crops department of this institution, was born and reared on a farm in Clarence, Ill. Mr. Parks received his B. A. degree from the University of Illinois in 1908. In 1912 he received his M. S. degree from the same institution. Later he attended Harvard, receiving his Sc. D. degree in 1916. Dr. Parks is a member of the Sigma Xi, Sigma Chi and Gamma Alpha fraternities.

Dr. Parks from 1908-11 was assistant chemist at the Illinois experiment station. From 1911-1914 he was connected with the association of plant breeding. In 1916 he was the associate editor of the "Ohio Journal of Science," 1918—Plant Breeding.

Besides being at the head of the crops department of this university he is associate professor of agronomy at the Ohio Experiment Station.

Mr. C. J. Willard, who is assistant professor in the crops department at this university, was born in Manhattan, Kansas. Mr. Willard received his B. S. degree at Kansas State Agricultural College, his B. A. and M. S. degrees at the University of Illinois. He is a member of the Sigma Xi and Alpha Zeta fraternities.

Mr. Willard has had experience in farming in two different states. From 1910-13 he farmed at Bradford, Kansas, and 1913-16 at Williamsburg, Va.

Mr. W. E. Hanger, who at the present time is professor of crops at this university, was born in Preble county, Ohio. Mr. Hanger received his B. S. A. degree at this institution in 1911.

He is a member of the Acacia and Delta Theta Sigma fraternities.

Prof. Hanger served as assistant agronomist at the Maryland Experiment Station from 1911-1915. Since 1915 he has been professor in farm crops extension work.

Mr. C. G. Williams, who is the agronomist at the Ohio State Experiment Station, and who is at the present time acting as director, is a member of the farm crops department here.

Besides Prof. Hanger of the extension department, there are two others. Mr. Earl Jones, class of 1912, and Mr. Earl Chenault, class of 1915.

Mr. Harold L. Borst, who has charge of the experimental work of the department, comes from the University of Minnesota.

OHIO WHEATFIELD DAY AT WOOSTER, JUNE 24

Wheatfield Day, an annual event for Ohio farmers held at the Experiment Station, Wooster, has been set for Friday, June 24.

Much of the experimental work done in wheat production at the Ohio Experiment Station will be open to the public on that day and explained in a demonstrational way to farmers by agricultural workers.

A number of farm bureau delegations from northern and northeastern Ohio are expected to conduct automobile tours to the Station throughout the month of June.

Summer field meetings are also planned for the experiment farms in Paulding, Hamilton, Clermont, Miami, Washington, Trumbull, Mahoning, Belmont and Madison Counties.

ENGLAND'S WHEAT YIELDS ARE POSSIBLE IN OHIO

Tests conducted in the growing of wheat at the Ohio Experiment Station show that the Ohio farmer has equal chance with the farmer of England in growing large crops of wheat.

The average yield of wheat in England is 30 bushels to the acre—grown largely by a liberal use of fertilizers on the crops preceding the wheat, while the average yield in Ohio does not run more than 15 bushels to the acre.

However, in a rotation of corn, wheat and clover at the Ohio Experiment Station, where the corn receives 8 tons of manure and 320 pounds of acid phosphate, the wheat following corn has averaged 28 bushels to the acre for 21 years, and in a rotation of potatoes, wheat and clover, which more nearly approaches the English practice, the wheat has averaged 38 bushels of wheat—this increase being clear per acre for 25 years.

Thus it is possible in Ohio to make the corn or potato crop pay for the cost of manure and fertilizer, and yet produce a large increase in the yield profit.

THE PLANT INSTITUTE

Many problems in plant production are beyond the scope of any one department. In order that they may be studied effectively it is necessary that specialists in different subjects and in different departments of the University should cooperate in attacking them from all points of view.

The need for such cooperation has been felt for some time by Dean Vivian and by members of the faculty of the College. To meet this need the Plant Institute of the Ohio State University has been organized. Its objects are, "to promote research with plants, to

conduct research projects of its own, and to stimulate and improve graduate work."

The Institute is made up of members and associate members. Membership is open to all persons having the rank of instructors, assistant professor or professor in the College of Agriculture who shall make application. Associate membership is required of all graduate students majoring in plant subjects in the departments of the College.

The advantages the Institute will offer to graduate students are especially great. Instead of being rather closely confined in knowledge and point of view to the department in which they are specializing, they will have an opportunity at the weekly seminary to take part in the discussion of plant problems from every point of view. Botanist, horticulturist, farm crops specialist, soils expert and chemist will meet in the discussion of these topics. Thus students of plant life will obtain a far broader and better training than is possible under the present system. Beside this, the graduate student must present his thesis subject, with an outline of the problem and the proposed method of attack to a committee of the Institute for discussion and approval. It seems certain that this feature will cause a real improvement in the interest the student takes in his problem and in the quality of the results he obtains.

Similar discussions will be had of the research problems of the members of the faculty. The suggestions and criticisms of men specializing in various phases of plant life will be of great value in making such work more effective.

Finally, the Institute will interest itself especially in such research projects as require the cooperation of two

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THE DAIRY

J. E. FREW, Editor.

PERSONNEL

Oscar Erf is professor of dairying at Ohio State University. He graduated from this institution in 1898. He was associate professor of dairy husbandry at the University of Illinois from 1899 to 1903, professor of dairying at the Kansas State Agricultural College from 1903 to 1907; and since 1907 has been professor of dairying at Ohio State University.

Professor Erf is the author of *Dairy Arithmetic* and *Dairy Fundamentals* as well as several magazine articles of timely interest to the dairy public.

At present he is secretary of the Ohio State Dairymen's Association. Much time and willing energy has been devoted by Professor Erf to the task of securing more adequate compensation for those who produce as well as sell milk, and at the same time working for the best interests of the consumer. He has also been the means of much legislation to further these principles.

Robert B. Stoltz is assistant professor of dairying. He graduated from this University in 1912 and has been teaching dairying since that time, having been assistant professor since 1914. He is secretary-treasurer of the Ohio Swiss Cheese Association.

Mr. Drain is a new instructor in dairying for Ohio State this year. He graduated here in 1913, and has since been employed in teaching dairying at Mississippi, North Carolina, and Massachusetts Agricultural Colleges, as well as being engaged as milk inspector in Dayton, Ohio. At present Mr.

Drain is teaching Dairying 101, City Milk Supply, and has charge of the short courses.

Mr. Don S. Kochheiser, a graduate student of 1919, is instructor in Dairy mechanics, and assistant in other courses. He has also had considerable interest in coaching the dairy products judging teams of this University, which have been competing at the National Dairy Shows, and making very excellent winnings.

NEW HEIFER

A new Shorthorn heifer has recently been purchased for the University. She was bought at the Seneca County Shorthorn Association Sale at Tiffin. Her name is Rose Mary of Ohio; she is of straight Scotch breeding and a very good individual.

The University at the present time is considering the purchase of some first class Herefords for a foundation of a University Herd of this breed.

HOLSTEIN BULL ADDED TO HERD

A sire with noted ancestors has recently been added to the Holstein herd here. He is a four-year-old son of Sir Pietertje Ormsby Mercedes 40th. He was bred by Frank Lockerman, of Gates Mills, Ohio.

At present he weighs slightly over a ton. A two-year-old half sister of his made in a year over 20,000 lbs. of milk; and a half brother was winner at the National Dairy Show.

Administrative and Extension

THE DEAN

Alfred Vivian, professor of agricultural chemistry and dean of the College of Agriculture, was born March 16, 1867, at Mineral Point, Wisconsin. He graduated from the University of Wisconsin in 1894, receiving his Ph. G. degree.

During the year following his graduation Mr. Vivian served as an instructor in pharmacognosy and from 1895 to 1897 he was an assistant in agricultural chemistry at the same University. Then he was promoted to instructor in agricultural chemistry and at the same time was employed as assistant chemist to the Wisconsin Agricultural Experiment Station, positions which he held until 1902.

At this time Mr. Vivian came to Ohio State University to serve as associate professor of agricultural chemistry until 1905, when he was promoted to the rank of professor of agricultural chemistry, his title at the present time. Since 1915 he has been Dean of the College of Agriculture.

Amid the busy rush of his work of college teaching and his work as Dean of the College, he has found time to prove his ability as an author. His first book, "First Principles of Soil Fertility," was published in 1908. This is a clear, concise treatise of the subject of soil fertility of great interest to the practical farmer, whose welfare and advancement he has at heart. His second book, "Everyday Chemistry," appeared in 1920. This is also a clear, concise work, in which he made

the subject of chemistry plain and attractive to anyone.

In 1913 Mr. Vivian was requested to go to Europe and the Far East to study agricultural conditions and to assist in establishing an agricultural school in India. He visited Europe, Africa, Egypt, India, China, Japan and the Philippines and returned to America by way of San Francisco.

THE SECRETARY

True George Watson was born in Springfield, Illinois, June 13, 1890. He received some of his high school training in Ohio and graduated from high school in San Francisco, 1909.

Knowing the advantages and importance of our College of Agriculture Mr. Watson came back to Ohio and began his agricultural training in 1909, and received his bachelor of science degree from Ohio State University in 1913. For his M. S. degree he went to the Iowa State College of Agriculture and received his Master's degree in 1916.

While he was attending Iowa State College Mr. Watson was an instructor in American and English history. After his graduation at Iowa he farmed for two years and then was elected as principal of a high school, in which capacity he served for the year 1916-17.

In the fall of 1918 Mr. Watson came to the Ohio State University to accept the position of instructor in agricultural chemistry and assistant to the Dean of the College of Agriculture. He was then elected secretary of the college. He holds these positions at

the present time with this exception, that he has been promoted from the rank of instructor to that of assistant professor in the department of agricultural chemistry.

EXTENSION DEPARTMENT

Harry C. Ramsower was appointed as head of this department in 1920. He was graduated from Ohio State University in 1906, receiving his Bachelor of Science degree in the College of Agriculture. In 1908 Mr. Ramsower was given the professorship as head of the Agricultural Engineering Department at Ohio State University, which he held until his present promotion to Director of Agricultural Extension Service. While professor at Ohio State Mr. Ramsower wrote many instructive articles pertaining to Agricultural Engineering subjects. He is also author of "Equipment for the Farm and Farmstead," which is the text book used in the elementary course in Agricultural Engineering at Ohio State, and other schools. Mr. Ramsower is an active member of the American Society for the Promotion of Agricultural Education, and the American Rural Life Association. He is also a member of Alpha Zeta.

George B. Crane was graduated from Ohio State University in 1913 with a Bachelor of Science degree in Agriculture. He was editor in the Extension Department during 1913-14. During 1914-15 he was with the American Cyanamid Company, Buffalo, N. Y. and also the John Wiley Evaporated Milk Company. In 1915 he took up his present work as Secretary of the Extension Service, and also assistant director of this department.

Mr. Crane was formerly assistant editor of the *Agricultural Student*, and

is a member of Alpha Zeta and Sigma Delta Chi.

Professor O. M. Johnson was graduated from Ohio State University in 1908, receiving his Bachelor of Science degree in agriculture. Professor Johnson at present is head of the Department of County Agents, a branch of the extension service, and also is Assistant Professor of Agricultural Chemistry. He is a member of Delta Theta Sigma.

Mr. A. E. Anderson, '12, is assistant in this department.

Mr. W. W. Brownfield, who was formerly County Agent of Marietta County, and Mr. George Eastwood, are departmental supervisors.

Mr. J. E. McClintock, who graduated in 1906 with Bachelor of Science degree, heads the Department of Publications. Mr. McClintock served as scientific assistant with the Bureau of Soils, U. S. Department of Agriculture, during 1906-07; from 1907-09 as assistant professor of Agronomy and Supervisor of Agricultural Extension work at the University of Maine. Since 1910 he has served as Agricultural Editor and Agriculturalist, International Correspondence School, Scranton, Pa. During this time he has published many interesting, and educational articles, among which are: "Exercise in Elementary Agriculture for Maine Rural Schools," "Feeding of Milch Cows." Mr. McClintock is a member of the American Breeders' Association and Alpha Zeta.

Mrs. Ethel Cadley, '14, serves as assistant in this department.

W. H. Palmer is the efficient head of the Boys' and Girls' Club Work Department. Mr. Palmer was graduated from Ohio State University in 1905 with the degree of Bachelor of Science. In 1907 he received his master's degree. Mr. Palmer has brought this work to

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VOCATIONAL AGRICULTURE BOYS' AND GIRLS' CLUB WORK, ETC.

E. B. BARKER, Editor; J. A. MALICK, Assistant.

CLUB DEPARTMENT PERSONNEL

State leader of boys' and girls' club work, W. H. Palmer, who is a native of Fairfield county, graduated from the University in 1905, taking his master's degree in agriculture in 1907. While in college he was active in various college organizations, being a member of the Alpha Zeta Fraternity, after spending five years on the home farm he returned to the University in January, 1912, as instructor in the department of animal husbandry. In August, 1912, he joined the agricultural extension service as specialist in animal husbandry, which position he held until March, 1919, when he was placed in charge of the Junior extension work.

B. B. Spohn, assistant state club leader, a Perry county product, began his career as a teacher in the public schools in that county. He graduated from Ohio University in 1917. For several years he was superintendent of the schools at Brownsville, Licking county, going from there to the superintendency of the schools at South Solon, Madison county. From South Solon he came to the University as assistant state club leader in 1917.

Hulda Horst, assistant state club leader, a native of Franklin county, graduated from North High School Columbus, Ohio, in 1911. In 1915 she secured her bachelor of science in home economics from the University. After graduation she held the position of extension specialist of home economics for several years, being transferred from that work in 1917 to her present position.

O. C. Croy, assistant state club leader, was born and reared near Dresden, Muskingum county. After graduating from the Dresden High School he entered the agricultural college of the University, from which he graduated in 1913. While in college he was interested in various college activities, being a member of Delta Theta Sigma Fraternity. After graduation he went to Fergus Falls, Minnesota, as agricultural teacher in high school. From there he returned to Ohio, becoming district superintendent of public schools in Muskingum county, from which position he came to the University in 1919 as assistant state club leader.

Guy Doudy, assistant state club leader, came to Ohio from his native state of West Virginia in 1919 to complete his college work for the degree of master of science in agriculture, which was conferred in June, 1920. He secured his B. Sc. in agriculture from the University of West Virginia, spending two years and a half as county agricultural agent in West Virginia before coming to Ohio State.

COUNTY CLUB AGENTS

Ten counties have full time county club agents employed cooperatively by the Ohio State University and the county farm bureau. Two counties have half time club agents employed by the county farm bureau. The full time leaders are:

Ashtabula, H. H. Claypool, Jefferson; Auglaize, C. M. Hampson, Wapakoneta; Crawford, H. R. Waugh, Bu-

cyrus; Cuyahoga, D. E. Hill, Cleveland; Hamilton, F. L. Wright, Cincinnati; Montgomery, C. C. Caldwell, Dayton; Muskingum, M. W. Brady, Zanesville; Summit, R. B. Tom, Akron; Tuscarawas, H. E. Kidd, New Philadelphia; Wood, R. C. Smith, Bowling Green.

Part time leaders: Sandusky, Warren Weiler, Fremont; Portage, M. R. Wright, Ravenna.

DEPARTMENTAL PERSONNEL

W. F. Stewart, professor of agricultural education, received his A. B. degree from Milton College in 1909, and M. S. degree from the University of Wisconsin in 1914. He became assistant in agricultural education at the University of Wisconsin in 1914, from which he became instructor in vocational agriculture at Tracy, Minnesota, until 1917. He then took the position of head of the agricultural education department at Ohio State University in 1917, which he still holds.

Ray Fife, assistant professor of agricultural education, who received his B. Sc. degree from Ohio Northern in 1909, was rural school supervisor from 1910 to 1915, during which time he spent his summers with the state board of agriculture. He also received his B. Sc. degree from Ohio State University, in 1917, and was assistant boys' and girls' club leader from 1917 to 1919. He spent summer sessions at the Universities of Wisconsin in 1918 and Cornell in 1919 and 1920. In 1919 he received the position which he now holds.

W. H. Nisonger, assistant professor of agricultural education, received his B. Sc. degree from Ohio State University in 1914. He was principal of the high schools at Bradford, Ohio, 1914-16 and Versailles, Ohio, 1916-19. He became instructor in agricultural edu-

cation in 1920, which position he now holds. He was a student at Ohio State University during the summers of 1914-15-16, and was a graduate student at the University of Chicago in 1917.

F. H. McMillen, assistant professor of agricultural education, received his B. A. degree at Miami University in 1916 and his B. Sc. degree at Ohio State University in 1917. He was assistant in agricultural education at the same place from February, 1917, to June, 1917, and instructor in vocational agriculture at Columbia City, Indiana, high school, 1917-18. He then became instructor in agricultural education at Ohio State University until 1920, when he received his present position.

EXPERT SAYS TEACHERS NEED RESEARCH WORK

At a meeting held under the auspices of the Plant Institute, a new organization of the College of Agriculture, Dr. E. W. Allen said "research work is necessary to keep the instructor informed and his students interested." This was the first of a series of meetings to be held by the Institute for the purpose of encouraging graduate work and research.

Dr. Allen is head of the experiment station branch of the U. S. Department of Agriculture and has charge of the administration of the Adams Fund.

ALUMNA

W. W. Ellenwood, '15, is manager of a 300 acre orchard at Coalton, Ohio.

Edward J. Petry, '07, is assistant professor of agricultural botany at Purdue.

S. M. Salibury, '13, is now head of the department of animal husbandry at Amherst, Massachusetts.

AGRICULTURAL ENGINEERING

R. J. MATSON, Editor.

INSTRUCTORS

There are now two professors and two assistant professors in this department. These men are exceptionally well trained—each in his own line of work.

Professor F. W. Ives is now at the head of the department. He graduated from the University of Wisconsin in 1908 and got his M. E. degree in 1909. He then took the position of designer for the International Harvester Co. and later was chief draftsman for the John Lauson Tractor Co. For several years he managed his 240 acre farm in Illinois and then came to Ohio State in 1912. He taught eng. drawing and in 1914 he entered the department of agricultural engineering under the supervision of Prof. Ramsower. In 1920 he was made head of the department. He helped to edit the present text used for eng. drawing 125 and is agricultural engineering editor for the Ohio Farmer and for Farm and Fireside. He is an active member of the American Society of Agricultural Engineers and member of the Alpha Zeta fraternity.

Professor G. W. McCuen graduated from the University of Illinois in 1915. While there he took two years of mechanical and three years of agricultural engineering. In 1915 he came to Ohio State and is teaching advanced farm machinery and farm power. Mr. McCuen is a member of the Alpha Zeta and Acacia fraternities.

Assistant Prof. P. B. Potter graduated from the Kansas State Agricultural College in 1915, with C. E. and B. S. degrees. Mr. Potter came to Ohio State in 1916 and has since taken full

charge of all drainage work. He is a member of Alpha Zeta fraternity.

Assistant Prof. Robert R. Thompson has recently been added to the agricultural engineering staff. He studied engineering in the University of Cincinnati for two years and then, becoming interested in agricultural engineering, he came to Ohio State and graduated from the College of Agriculture in 1912. After his graduation he managed his farm for several years, entering the extension department in March, 1920. This year Mr. Thompson is teaching courses in farm engineering and field machinery.

These men are now editing a new text on agricultural engineering. This book is being printed by Ginn & Co. and will soon be out. It will be a secondary treatise covering all phases of agricultural engineering and especially suitable for high school work.

Such a course entered into the high school curriculum would be a popular subject among the students. It would give a general knowledge of farm engineering and of the things that are desired on the modern farm, to the student that cannot take advantage of further education, and would give elementary training to those preparing to enter college.

EQUIPMENT OF THE DEPARTMENT

The students of agricultural engineering have a complete line of machinery to work with. At present there are two large steam engines, seventeen tractors and eight stationary engines in the laboratory.

There are two large prony brakes for testing the belt power of the tractors and several small pronies for testing the stationary engines.

Besides these there is a complete line of farm machinery including four grain binders, four manure spreaders, four corn planters, three mowers and such other machinery as walking plows, gang plows, tractor plows, disc harrows, cultivators, etc., which are necessary to make modern farming a success.

In the line of home conveniences there are four lighting plants, eight water systems and three hydraulic rams.

The domestic engineering laboratory has eight washing machines plus other laundry equipment, such as pumps, water supply systems, lighting plants and small gas engines.

TRACTOR EXPERIMENT

Twenty-nine acres of the University farm, situated just back of the campus and north of King avenue, has been turned over to the Department of Agricultural Engineering for tractor experiments.

The entire tract of land is exceedingly level and is an ideal place for tractor work.

The work is being done by the professors of the department, who are now preparing to plant the entire tract to corn. The land was plowed with tractors and is being put into order by tractor drawn implements. They have a six cylinder motor planter with which the corn will be planted, and two motor cultivators which will be used for cultivation. In the fall they intend to harvest the crop with a corn binder drawn by a tractor.

This will make the complete motorization of the tract, and the data which they will collect should afford valuable

information on the efficiency of the implements and tractors used.

GASOLINE VS. KEROSENE

The question as to whether gasoline or kerosene is the best fuel upon which to operate a tractor is one which has presented itself very keenly to the farmers of Ohio, and one for which there has never been a definite answer presented.

Some recent experiments carried on in the Agricultural Engineering Department throw some very interesting light upon the problem. Using a new Samson Model M tractor, with high test gasoline, low test gasoline and kerosene, and varying the load from quarter to maximum, it was found that kerosene was three times as cheap as the high test gas, and twice as cheap as the low test gas.

As regards maximum power developed, with high test gas it pulled 22.6 H. P., with low test gas 21 H. P., and with kerosene 19.35 H. P.

Kerosene is not as satisfactory on heavy loads from the standpoint of ease of adjusting, flexibility of power and smoothness of running, as either of the gasolenes.

EXTENSION DEPARTMENT

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the front in the past few years, and has created a great stimulus among boys and girls for the work.

Assistants in this department are B. B. Spohn, Guy Dowdy, O. C. Croy, who graduated in 1913 with the degree of B. S.; and Hulda Horst of the class of 1915, B. S. Home Economics.

The department of Farmers' Institutes is headed by F. S. Allen, who was formerly County Agent of Geauga County.

❖- HORTICULTURE -❖

THE DEPARTMENT'S WORK OUTLINED

Horticulture has been taught at the University for many years. At first the Department was housed in a small and dingy building with poor equipment and facilities for laboratory work.

In the fall of 1909 Professor W. Paddock came to the University as head of the Department of Horticulture. Finding the department in very great need of a new building, a campaign was immediately started which reached a crisis in 1913 when an appropriation was first secured. The building was completed and ready for occupation by the fall of 1914. In designing the building the architect made special provisions for a canning laboratory, spray laboratory, fruit grading and packing room, cold storage plant, timber treating room and forestry.

At first only courses in forestry and pomology were given, but with the increased enrollment and added facilities new courses were added.

The first work in vegetable gardening was given by Professor L. M. Montgomery, a graduate of the Fort Collins Agricultural College and who had been an instructor at the Oklahoma Agricultural College. He came to Ohio State in 1909 receiving his master's degree the following spring. The work given in vegetable gardening is under his direct supervision. Besides his work at the University he is actively engaged in promoting the work of the Ohio Vegetable Growers' Association secretary.

Another branch of the Horticultural Department was created in 1915 when

the course in professional Landscape Architecture was started with P. H. Elwood as assistant professor and A. D. Taylor non-resident professor.

During the war little work was done in this branch. Prof. Elwood was enlisted in the U. S. Army as captain and while serving in France designed the Argonne Cemetery — America's most beautiful tribute to her dead heroes. Since that time the enrollment has gotten back to normal, and many students are preparing for professional architecture.

For some time the need of a floriculture branch was badly felt, finally in 1916 work along this line was started, when the services of Professor A. C. Hottes were secured. Professor Hottes is a graduate of Cornell University, receiving his master's degree from the same institution in 1914. The two following years he was assistant in the department of Biology and Horticulture, and instructor in Floriculture. He is quite widely known having written a number of books and bulletins and has lectured throughout the country on subjects of floriculture.

The Forestry branch which for some time was planned to give a four year course in forestry has been changed, so that now several separate courses in forestry are given, which pertain to the actual forest problems as they exist in this country today. Professor N. W. Sherer who has been connected with the United States Forestry Department is now conducting this work.

When the Horticultural department was first started most of the work given was of a pomological nature, and as

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Carmen Ohio



Oh, come, let's sing Ohio's praise
And songs to Alma Mater raise;
While our hearts rebounding thrill
With joy that death alone can still.

Summer's heat or winter's cold,
The seasons pass, the years will roll;
Time and change will truly show
How firm thy friendship—Ohio.

These jolly days of priceless worth
By far the gladdest days on earth,
Soon will pass and we'll not know
How dearly we love Ohio.

We should strive to keep thy name
Of fair repute and spotless fame;
So in college halls we'll grow
And love thee better—Ohio.

—*Fred Cornell, Ex. '06.*

THE CAMPUS ECHO

H. W. HARSHFIELD, Editor; MERRILL CONN, Assistant.

SADDLE AND SIRLOIN CLUB

Altho having passed thru the "Rip Van Winkle" stage of its existence a short time ago, this organization is again alive. During the second semester they handled two occasions successfully, namely the Sheep Shearing Contest and an All Ag night in the Chapel. This last occasion was held in place of the usual Horse Show in cooperation with the Columbus Riding Club. This show was called off this year due to the fact that that organization desired to appropriate all profits accruing from such a show.

The All Ag Night featured Secretary of Agriculture N. E. Shaw who discussed livestock from the Department standpoint. Two interesting films on livestock were shown. The Y. M. C. A. quartet and part of the Grange Orchestra furnished the music.

During the second semester the club enrollment doubled altho several members were dropped due to non-payment of dues. At present the club stands strengthened ready to shoulder the responsibilities of next year.

They desire to announce that new live members are desired, membership being open to all ag men.

WHY COME TO OHIO STATE

When you come to Ohio State to take a course in agriculture you are attending the largest agricultural college in the United States. During the year that ended June 30, 1920, there were 6,974 who were enrolled in the four-year course, three-year course,

winter course, or Farmers' Week. Others are served by the College of Agriculture through the farmers' institutes, extension schools, boys' and girls' club work, and field demonstrations. Bulletins, news letters, and the farm bureau monthly reached 1,235,665. There were 10,618 taking correspondence courses. The rural economics department is doing much good in farm management work and farm account schools. In all it was calculated that 1,913,765 were reached under the different branches of the college.

RESIGNED TO TAKE UP FARM BUREAU WORK

Mr. F. C. Dean, assistant editor of publications in the extension department has resigned, to be editor for the Ohio Farm Bureau Federation.

ALL AG. BANQUET BIG SUCCESS

The all ag. banquet held at the New Southern Hotel on the 22nd of April was declared a big success. An attendance of nearly five hundred distinguished it as the largest attended banquet in its history.

The committee in charge were very fortunate in getting two speakers of national fame, Mrs. Henrietta Calvin of the U. S. Department of Education, who talked on home economics in our schools; and Mr. E. D. Ball, assistant Secretary of Agriculture, who talked on agricultural conditions of today. Dean Vivian acted as toastmaster, and closed the program with an invitation to President Thompson for a short

talk, ending by his leading in the singing of our "Alma Mater."

It was decided to keep the banquet an annual affair.

LIVE-STOCK BREEDER LOANS ANIMAL TO UNIVERSITY

Thomas E. Wilson, head of the Thomas E. Wilson Packing Co. of Chicago, and nationally known breeder, visited the animal husbandry department of the University on the 21st of April. Mr. Wilson has loaned the University a short-horn bull, "White Hall King," for one year.

The bull is insured by Mr. Wilson for \$2500.

Mr. Wilson's visit here was coincident with his trip to Columbus for the opening game of the American Association at Neil Park on the same date, he being the owner of the Columbus "Senators."

TOWNSHEND AGRICULTURAL SOCIETY

Townshend Agricultural Society has made a big success this year in keeping up enthusiasm and interest in things literary. Many novel and worth-while programs have been put on and participated in by members of the society. It fills a needed place in the Agricultural College where a student may get enjoyment as well as experience in speaking before an audience.

A. S. A. E. MEETING

The student branch of American Society of Agricultural Engineers held a business meeting and open night in the University Chapel on the evening of April 27. Tractor films furnished by the Midwest Engine Co. of Indianapolis, Ind., and the Renault Selling Agency of New York were the features of the program. Officers were elected for the following year: President, B.

P. Hess; vice-president, A. H. Smith; and secretary-treasurer, I. L. Saveson.

HOW'S THIS?

In the College of Agriculture there are 13 departments strictly agricultural. For the regular four-year course more or less work is required in 10 other departments. In these 13 departments there are 24 professors, one associate professor, 22 assistant professors, 26 instructors, 23 assistants and 121 in extension work, making a total of 217 on the instructional staff of the Agricultural College. This does not include those engaged in vocational agriculture.

ALUMNI

R. E. Wallace, '06, is assistant professor of soils at Purdue.

H. F. Benton is the new county agent for Stark county. His office is at Canton, Ohio.

J. B. Markey, '15, is on the home farm at Eaton, Ohio.

A. Hartley Benton, '12, is professor of farm management and rural economics at the Manitoba College of Agriculture, Winnipeg, Manitoba.

Lawrence M. Fox, '07, is county agent with headquarters at Kingwood, West Virginia.

Howard S. Murphy, '08, D. V. M., is professor in the department of veterinary anatomy at Ames, Iowa.

Alvin S. Neale, '04, who was formerly dairy extension lecturer in Ohio is now with the Kansas College, as extension dairy expert.

Charles E. Snyder, '09, is associate editor of the National Stockman and Farmer, Pittsburgh. While in school he was editor-in-chief of The Agricultural Student.

HOME ECONOMICS

MARGARET MERICKEL, Editor.

HISTORY OF THE DEPARTMENT

IN the year 1896 a course was established at the Ohio State University which was called Domestic Economy. Miss Perla G. Bowman, Professor of Domestic Science, was the first head of this course which was organized and known as a subdivision of the College of Agriculture and Domestic Science until 1911. There were two distinct divisions of this branch of learning, namely, "Domestic Science" and "Domestic Art."

Two curricula were outlined, one covered a period of four years and offered a broad liberal foundation in the sciences, languages and arts as well as courses which dealt directly with problems of the home. The other was a two-year course, the second year consisting of very elementary courses in Domestic Science, the first year being similar to the first of the four-year course. On the main floor of Hayes Hall the department maintained laboratories, including an attractive dining room. In 1899, Miss Cornelia P. Louther and Miss Sarah James were appointed as Assistant Professors of Domestic Economy, and were to work with Miss Bowman. In 1901 Miss Bowman resigned and Miss Minnie A. Stoner, Professor of Domestic Science, became head of the department. Miss Louther remained as her assistant, having the title of Assistant Professor of Domestic Art. Between the years 1901 and 1906 no important changes were made but in 1905 Miss May Secrist, Assistant Professor of Domestic Science, came to the University and in the following year Miss Virginia Bobb was

appointed as Associate Professor of Domestic Art and was given charge of all the domestic art work. In 1908 Miss Ruth A. Wardall, Professor of Domestic Science, was appointed head of the department. In the following year Miss Edna Noble White, Associate Professor of Domestic Science, became a member of the department, and Miss Anna Katherine Flint as Associate Professor of Domestic Art was appointed to succeed Miss Bobb.

In February of 1909, a three-weeks course known as "The Homemakers' Course" was established for the purpose of instructing women, especially those from rural districts in the subject of Domestic Science. The number was limited to forty and thirty-nine women responded and enrolled, representing twenty counties of our state. In the years which intervened between 1909 and 1914 the course of study showed slight changes from year to year, as a result of experience in the development of this comparatively new subject. The curriculum which had formerly been a three-term plan was in 1910 placed on a semester basis. In the next year the name of the College of Agriculture and Domestic Art and Science was changed to the College of Agriculture. Beginning with 1913 the Department of Domestic Science became the Department of Home Economics.

The present head of the department is Miss Faith Lanman, who graduated from Ohio State University in 1903, receiving her Bachelor of Science de-

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ANIMAL HUSBANDRY

J. GLENN BATES. Editor; E. L. HAWK, Assistant.

PERSONNEL OF DEPARTMENT

Carl Warren Gay graduated from Cornell University at Ithaca, N. Y., in 1899, receiving the degree of D. V. M. and the following year, 1899-1900 was awarded a graduate fellowship in the same institution. From 1900-1904 he served in the Veterinary Division of Iowa State College at Ames, Iowa, and in 1904-1905 was Assistant Professor of Animal Husbandry at the same institution. The following year he came to Ohio State University where he served as Assistant Professor of Animal Husbandry 1905-1906 and as Associate Professor 1906-1907. From 1907-1916 he was Professor of Animal Husbandry at University of Pennsylvania and during the same time was also Director of Horse Breeding of the Department of Agriculture in the Commonwealth of Pennsylvania. He was Manager of the Farm of the Pennsylvania Live Stock Sanitary Board from 1911-1916. Going next to Minnesota, he served as professor of Animal Husbandry and chairman of the Animal Industry Group at the University of Minnesota from 1916-1920. From Minnesota he returned to Ohio State University and has since been at the head of the Animal Husbandry Department.

Dr. Gay is the author of "Productive Horse Breeding" and "Principles and Practices of Judging Livestock," both of which were published in 1914. Later in 1916 he was also editor of "The Breeds of Livestock," which was published in 1916. In addition to the above work Dr. Gay is recognized all over the country as a competent judge of livestock, and an authority on breed-

ing of livestock. He is a member of Alpha Gamma Rho and Alpha Zeta.

Professor Charles H. Plumb, of the Animal Husbandry Department received his B. Sc. degree from the Massachusetts Agricultural College in 1882. He was an associate editor of the Rural New Yorker, 1883-4. He later became first assistant director of the State Experiment Station at Geneva, N. Y., 1884-7, followed by directorships of the Tennessee and Indiana Stations, 1887-90 and 1890-1 respectively. While in charge of these stations he held a professorship at both the University of Tennessee and at Purdue University. He came to Ohio State University September 1, 1902, as professor of Animal Husbandry, and has been connected with that department ever since.

Prof. Plumb is secretary of the American Dexter and Kerry Cattle Club, as well as several other agricultural and scientific societies. Fraternally, he is a member of Sigma Xi and Alpha Zeta.

Prof. Plumb has written several books on Animal Husbandry, among which are found "Types and Breeds of Farm Animals," written in 1906, revised in 1920; "A Partial Index to Animal Husbandry Literature," in 1911; "Beginnings in Animal Husbandry," in 1914; "Judging Farm Animals," in 1916; as well as many monographs of agricultural and livestock topics in magazines, agricultural and livestock periodicals. He was editor and publisher of Agricultural Science, 1887-91. Professor Plumb has been foremost in the carrying out of many breeding experiments while associated with the

above institutions. He has traveled in Europe in the interest of Animal Husbandry and at the present time is in charge of the Sheep Department at Ohio State University.

Donald J. Kays was born and reared on a corn belt farm in Putnam County, Illinois. He received his early education in the country school and later graduated from a four year accredited high school. After leaving high school, he entered the Northern Illinois State Normal School at De Kalb, Illinois. After his graduation he taught and coached basketball in the high school at Rockford, Illinois, for two years. Following this he operated the home farm two years and then entered the University of Illinois in 1910, majored in Animal Husbandry and graduated in the spring of 1912. Since that time he has been employed in the Animal Husbandry Department and in charge of the Horse Division at Ohio State University. While here he has taken work in the College of Veterinary Medicine and with the completion of a little more work will receive his D. V. M. degree. At the present time he is serving as secretary and treasurer of both the Ohio Percheron Breeders' Association and the Ohio Belgian Breeders' Association. He has a national reputation as a competent horse judge and has acted in that capacity at several of the prominent horse shows and larger fairs. He is a member of Alpha Zeta and Alpha Delta Phi.

Professor Joel S. Coffey was graduated from the University of Illinois in 1912, receiving the degree of B. S. in Agr. After graduation he went to Purdue University where he was an instructor in Animal Husbandry until 1914, when he came to Ohio State University as assistant professor in Animal Husbandry. He has since been raised

to a full professorship and placed in charge of the Swine Department. During the summers of 1913-14 and 18 he was Lecturer in Animal Husbandry at the University of Iowa. Mr. Coffey is the author of two Extension Bulletins, one on Hog Management and the other on Hog Judging. He is a regular contributor to the Chester White Journal as well as several Agricultural papers. He is a member of Acacia and Alpha Zeta.

Clifford T. Conklin was born and raised on a farm near Struthers, Ohio. He attended the Ohio Northern University from 1910-13 after which he came to Ohio State University receiving his B. S. in Agr. in 1916. He was a member of the stock judging team as well as a student assistant during his senior year in college. He was employed in Animal Husbandry Extension work in 1916-17 and the following year he was instructor in the department of Animal Husbandry. In 1918 he was made assistant professor, which position he has held since, being in charge of the Cattle and Meats Division. During the summer of 1916 he was on a fair circuit with Bell Bros. The following summer was spent fitting cattle for sale on the Carpenter and Ross farm. He has done considerable judging at fairs throughout the state. He was superintendent of the Horse Show held in connection with the National Dairy Show, as well as superintendent of the Night Horse Show of the Ohio State Fair.

EXTENSION MEN

John W. Wuichet graduated from Ohio State University in 1908, receiving his degree of B. S. in Agr. following which he farmed for eight years in Montgomery County. Since 1916 he has been employed at Ohio State University as Swine Extension Specialist.

While on the farm he was interested primarily in Hampshire Hogs and was director of the American Hampshire Swine Record Association from 1912-1920. He is a member of Kappa Sigma and Delta Theta Sigma.

Paul Gerlaugh graduated from Ohio State University in 1913 with the degree of B. S. in Agr. Following his graduation, from 1913-17 he was a member of the Animal Husbandry Department and Experiment Station at Pennsylvania State College. Coming back to Ohio he was county agent of Wood County, 1917-20, after which he had charge of the home farm in Southwestern Ohio during the year of 1920. While on the farm he was interested in the production of Duroc Jersey Hogs. At the Ohio State Fair in the fall of 1920, his boar Orion King Perfect, was grand champion, and a sow was also placed in the group of the five best sows shown. Since leaving the farm in February of 1921, he has been employed as Beef Cattle Extension Specialist at Ohio State University. He is a member of Alpha Zeta.

POULTRY DEPARTMENT

Freeman Steel Jacoby received his B. S. A. degree from Cornell University at Ithaca, N. Y., in 1910. He was Assistant Professor in Poultry Husbandry at Kansas State Agricultural, 1910-1911, and instructor in Poultry Husbandry at Ohio State University, 1911-1912. He was assistant in Poultry and Egg Investigation, United States Food Research Laboratory in the summer of 1913, and Special Poultry Investigator at the West Virginia Experiment Station in the summer of 1914. During the Ohio Poultry Exhibit at the Panama-Pacific International Exposition in 1915 he was Member in Charge. From 1912-1918 he was Assistant Professor

of Poultry Husbandry at Ohio State University and since then has been at the head of the Poultry Division in the same institution. He is a member of Sigma Phi Sigma and Alpha Zeta.

Eyverett Leroy Dakan was born and raised on a farm in Missouri. He graduated from the University of Missouri in 1918 with the degree of B. S. in Agr. Previous to his graduation he was out of school for two year as manager of a large stock farm near Kansas City. He was at the head of the Poultry Department at South Dakota Agricultural College during 1918-19. Since then he has been Poultry Extension Specialist at Ohio State University.

Gates S. Vickers graduated with the degree of B. S. in Agr. from New Mexico Agricultural College in 1917. He was assistant county agent in Chaves County in 1917. He was employed as Instructor in Poultry in New Mexico Agricultural College, 1917-19. He next went to Cornell University at Ithaca, N. Y., and received his M. S. in Agr. During the summer of 1920 he was in extension work at Cornell and in the fall come to Ohio State where he has since been an Extension Specialist in Poultry here. He is a member of Acacia.

ALUMNA

Charles Conger Parmer, '12, is professor at the Delaware State College of veterinary medicine.

Richmond Lee Shields, '07, is professor of agriculture at the Peabody College for Teachers at Nashville, Tennessee.

V. H. Davis, '00, former professor of Pomology, is now manager of a 700 acre orchard at Catawba Island.

B. L. Drain, '17, is professor of Pomology at State Agricultural College, Amherst, Mass.

ANNOUNCING OUR LIVE STOCK SERVICE DEPARTMENT

Just as agriculture is the basis of all wealth, all industry, and all development in the United States so is Live Stock the foundation to successful agriculture. This nation cannot thrive without its farms; our farms cannot prosper without their live stock. Today hogs and dairy cattle are in more than one sense stabilizing the nation and at all times live stock maintains the country's progress.

Because the Live Stock Industry occupies the key position in the nation's progress and because the Live Stock Industry is vital in the progress of the business of this company, The Quaker Oats Company recognizing this vital relation and desiring to contribute a part toward the growth and improvement of the nation's most important industry has established a Live Stock Service Department and has selected Professor J. A. McLean to develop and execute this phase of the Company's work.

Professor McLean holds an Arts degree from McMaster University, Toronto, and graduated in Animal Husbandry from the Iowa State College. For over four years he was head of the Animal Husbandry Department in the Massachusetts State Agricultural College, where he established the major course in Animal Husbandry; for more than four years he was head of the Animal Husbandry Department in the University of British Columbia, there establishing a new department in a new institution. He has judged at many leading fairs from coast to coast. He is an extension lecturer with few equals. Whatever the type of his work is it has been marked with distinction and received with appreciation.

While his work in the Live Stock Service Department of the Quaker Oats Company will require considerable writing, yet his services are available to county agents, breed secretaries and other extension agencies for lecture and demonstrational work along all live stock lines; to breed associations and fair secretaries for judging work; to all live stock developing agencies where this department can assist; and to every man who has a problem in the feeding, breeding and management of any class of live stock.

This is intended to be a real Live Stock Service Department; the more it is used, the more assistance it renders, the more pleased we will be.

The Quaker Oats Company Address: Chicago, U. S. A.

FARM MANAGEMENT

RURAL LIFE, ETC.

B. P. HESS, Editor.

WHAT ABOUT THE DEPARTMENT?

The first course in Rural Economics, called "Rural Economy," was given during the year 1892-93 by Professor Thomas Hunt of the Department of Agriculture. At that time there was only three departments — Agriculture, Horticulture and Agricultural Chemistry. In 1916 the course in Rural Economy was replaced by "History of Agriculture and Rural Economics," also given by Prof. Hunt. In 1900 this was supplemented by a division called "Zootechny and Rural Economics."

In June 1903 this division was divided into two separate divisions within the Department of Agriculture; namely—Rural Economics and Animal Husbandry. Prof. H. C. Price was made head of the Department of Agriculture with the title of "Professor of Rural Economics and Manager of the University Farm." In April 1905, the Department of Agriculture was abolished, and four new departments were established, namely: Agronomy, Animal Husbandry, Dairying and Rural Economics. Thus this is the oldest Department of Rural Economics of any State University, being followed closely, however, by similar departments at Wisconsin and Cornell. Prof. Price was made head of the first Department of Rural Economics as well as holding the position of Dean of the College of Agriculture.

Three courses: "Farm Management," "History" and "Literature" were offered in 1904-05. A course called "Ru-

ral Economics," was added in 1908. "Farm Accounts and Records" and "Research Work for Graduate Students" were included in 1909. In 1914 a course in Rural Community Life and Rural Sociology was added, making a total of seven courses offered by the Department.

When Prof. Price left the University in 1915, Prof. P. L. Vogt came as head of the Rural Economics Department, Dean Alfred Vivian assuming the management of the University Farm. In 1916 Mr. Lantis, now a member of the department, was appointed to take up extension work in Rural Sociology. Upon the resignation of Prof. Vogt on January 1, 1916, Prof. J. I. Falconer, a member of the department since 1914, became the head. This position he still retains.

Since Rural Economics has been a separate department it has made some very rapid progress, until now its field of work includes, with their many phases — (1) Production and Farm Management, (2) Marketing and Distribution Cooperation, and (3) Social Side of Farm Life, Rural Sociology and Community Life. Not all of the department members are used as class instructors for their time is divided among teaching, extension and investigation, some spending all their time in extension.

The following are members of the department:

J. I. Falconer, head of the department, a native of New Hampshire, graduate of New Hampshire University, assistant in Agronomy at R. I.

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Experiment Station, and three years at the University of Wisconsin in graduate work in Rural Economics. He is instructor in general Rural Economic subjects.

H. E. Erdman, native of South Dakota, graduate of South Dakota State College, student and graduate assistant in Rural Economics at University of Wisconsin, 1914-'7, doctor's degree from Wisconsin 1920. He has charge of teaching and investigation of general subjects in Rural Economics.

L. O. Lantis, a son of Ohio, A. B. and A. M. at Miami University, former teacher of history at Columbus North High School. Instruction in Rural Sociology, spending part time in teaching and part time in extension, is his task.

Z. B. Wallin, graduate of University of Wisconsin, taught Rural Economics at University of Utah, Utah State Agent of Marketing, has charge of extension marketing.

F. L. Morison, graduate of O. S. U. with master's degree in 1917. Farm accounting employs his time.

In Farm Accounting Extension work, F. R. Taber, coming from New York and a graduate of Massachusetts Agricultural College, has the northern part of Ohio; while southern Ohio is covered by C. R. Arnold, an Ohio man both as to birthplace and Alma Mater.

J. F. Dowler, at Jamestown, and H. C. Brunskill at Medina, have charge of Cost Accounting Circles run in cooperation with the U. S. Department of Agriculture.

The proof is now out and the book will soon be published on "Market Milk" by Prof. H. E. Erdman.

Three bulletins prepared by members of this department have been issued by the Ohio Extension Station; a fourth one is in print.

Prof. J. I. Falconer is secretary-treasurer of the American Farm Economics Association.

SIX POINTS

That May Help You to Market at Higher Prices

First—Watch the city market prices on things you have to sell, and if you have a large quantity of it see if you can't sell to better advantage by shipping direct to a central market instead of selling to a local buyer.

Second—To learn the name of a reliable commission merchant at that central market, write and ask your state market commissioner or your state department of agriculture, or the bureau of markets, department of agriculture, Washington, D. C., and you will get the information.

Third—If your product must be packed or baled, ask your commission man to write you full details of how to grade and pack it so he can give you the most money for it.

Fourth—Go to the local banker or lawyer you have confidence in, and get him to tell you the safest and best way to conduct your financial dealings with the commission man at your central market.

Fifth—Find out from your railroad agent or your commission man the best and safest way to pack your product in the box car in which it is shipped.

Sixth—If possible, make a trip to your central market, get acquainted with your commission man, and have him show you how farm products are handled in the central markets, and why certain packing and grading is profitable to you.—*Farm and Fireside.*



Put Running Water in Your Home

It's a great convenience to have absolutely fresh water at hand all the time—no running to the pump or spring.

And a tank by the stove gives you hot water without the trouble of warming it in pans or kettles.

A MILWAUKEE AIR POWER WATER SYSTEM does away with a lot of hard work about both house and barn. Then think of having a nice bath room!

The MILWAUKEE SYSTEM brings the water "Direct from the Well"—absolutely fresh. There is no water storage tank and nothing to freeze. It is as reliable as any other farm machinery, and the pumps are remarkably simple.

Why handle water by hand just like your grandfather did when you can do it quicker, easier and better BY MACHINERY?

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SOILS

W. E. KEYSER, Editor.

PERSONNEL OF DEPARTMENT

Firman E. Bear, professor of agricultural chemistry and soils, was born in 1884 and reared on a farm near Germantown, Ohio. He received the degree of B. S. in agriculture in 1908 at the Ohio State University and his M. Sc. degree in 1910 at the same institution. Until 1913 he served in the capacity of instructor and assistant professor, when he accepted the position of professor of soils and took charge of the soils investigation research work at the University of West Virginia. In 1916 Prof. Bear returned to the Ohio State University in the capacity of the present writing. In 1917 he received the degree of Ph. D. at the University of Wisconsin. During the summer of 1911 Mr. Bear studied agricultural conditions in Europe, and in 1918 began the publication of "Timely Soil Topics." Many articles and bulletins of soil research works bear his name.

John F. Lyman, professor of agricultural chemistry and soils, was born in 1881 at Mesopotamia, Ohio. He received the degree of B. S. in agriculture in 1905 at the Massachusetts State Agricultural College, and his Ph. D. degree at Yale in 1909, where he made a study of physiological chemistry. In 1909 he came to the Ohio State University as assistant professor of agricultural chemistry and in 1914 he received the present title. Prof. Lyman is making a special study in the investigation of fats and has published several papers in his investigational work from time to time.

Thomas G. Phillips, assistant professor of agricultural chemistry and

soils, was born at West Derby, Vermont, in 1887, and reared on a small farm. In 1912 he received his B. S. in agriculture degree at the Ohio State University, where he held the position of instructor until 1915. During this time Mr. Phillips received his M. Sc. degree. Since 1915 he has served in the capacity of the present position. In 1918 Mr. Phillips received the degree of Ph. D. at the University of Chicago.

Geogre M. McClure, instructor of agricultural chemistry and soils, was born at Wooster, Ohio, in 1888. Mr. McClure secured an undergraduate training at the Wooster University in 1906-1909, and graduated and received the degree of B. S. in agriculture at Ohio State University in 1914. During the period from 1909 to 1914 Mr. McClure was employed as a chemist at the Ohio Experiment Station. Since 1915 Mr. McClure served in the present position, during which time he secured a M. Sc. degree. He now is pursuing work leading to a Ph. D. degree.

Guy W. Conrey, instructor in agricultural chemistry and soils, was born at Northboro, Iowa, in 1887. He received the degree of B. S. in agriculture and M. A. in the years 1908 and 1909 at the University of Mich. Undergraduate work was taken at Simpson College, Iowa. From 1909 to 1917 Mr. Conrey was connected with the state soil survey of Wisconsin and also instructor in 1914. Since 1917 he has served in the present position at Ohio State University and recently placed in charge of the state soil survey of Ohio. Mr. Conrey has nearly completed his work leading to a Ph. D. de-

BETTER SIRE CONTEST

As a medium for promoting the enrollment of breeders of live stock in Ohio for the purebred sire campaign in this state, the following prizes are offered for competition under the conditions given:

CONDITIONS OF COMPETITION

First, the competition is to be between counties.

Second, the period of competition is the month of June.

Third, the persons representing each county must be boys or girls not over eighteen year old.

Fourth, each boy or girl participating in the contest represents a county, and his or her work will be to secure the enrollment of as many persons as possible in the county in behalf of pure bred sires.

Fifth, each person enrolled must fill out and have properly signed the blank form for this purpose, which will be supplied by the County Agent, or by the Department of Animal Husbandry, Ohio State University, Columbus, in case there is no Agricultural Agent in the County.

Sixth, all filled out enrollment sheets are to be turned over to the County Agricultural Agent, or in case of there being no such agent, are to be mailed to the Department of Animal Husbandry, at the Ohio State University. These enrollment sheets may be turned in at any time between June first and the morning of July first. All records must be mailed to the Ohio State University by July first, as shown by post office record or by personal delivery.

Seventh, no enrollment sheets are to be filled out in this competition by persons owning poultry only.

Eighth, further information regarding the pure bred sire campaign in Ohio may be se-

cured in printed form from the County Agricultural Agent, or the Department of Animal Husbandry, care Professor J. W. Wuichet, Ohio State University, Columbus, Ohio.

PRIZES OFFERED.

First Prize, a silk banner to the county enrolling the largest number of names in excess of one hundred.

Second Prize, to the boy or girl enrolling the largest number of names in the state, one hundred and twenty-five dollars. To secure this prize, which is offered by students and faculty of the College of Agriculture at Ohio State University, through the efforts of the Saddle and Sirloin Club, the contestant must enroll at least fifty persons as users of purebred sires.

Second Prize, a Hereford bull calf, offered by Mr. J. V. Hill, Roundhead, Ohio.

Third Prize, choice by the winner of a Holstein-Friesian bull calf offered by Ohio State University; a Guernsey bull calf offered by Circle W. Farm, Gates Mill.

Fourth Prize, choice of the following boar pigs: Duroc Jersey, offered by Thomas Johnson, Columbus, Ohio; Hampshire, Depew Head, Marion Ohio; Berkshire, Hoisington Bros., Creston, Ohio; Poland China, Ohio State University.

Fifth Prize, choice of a pure bred ram lamb or yearling: Shropshire, L. B. Palmer, Pataaskala, Ohio; Southdown and Merino, Ohio State University, Columbus, Ohio.

The following organizations contributed to the first prize of \$125:

UNIVERSITY GRANGE
TOWNSHEND AGRICULTURAL SOCIETY
SADDLE AND SIRLOIN CLUB
SHORT AG. SOCIETY
THE AGRICULTURAL STUDENT
FACULTY

UNDER THE AUSPICES OF THE

Saddle and Sirloin Club

COLUMBUS, OHIO.

C. V. KENDALL, Pres.

O. S. U.

W. F. CORCORAN, Sec'y.

(This advertisement donated by the AGRICULTURAL STUDENT.)

gree and a study of soils from the physical point of view.

Robert M. Salter, assistant professor of soils extension service, was born at Bryan, Ohio. He received the degree of B. S. in agriculture and M. Sc. at Ohio State University in 1914 and 1916 respectively. In 1916 Mr. Salter accepted the position of chemist in soils research work at the University of West Virginia and in 1917 the position of professor of soils and placed in charge of soils investigation work, also the head of agronomy department of crops and soils in 1918. In February, 1920, Mr. Salter returned to Ohio State in the capacity of assistant professor.

Charles L. Thrash, assistant of agricultural chemistry and soils, was born at Carroll, Ohio, and received the degrees B. S. A. and M. Sc. at Ohio State University in 1917 and 1920. Mr. Thrash is also in charge of field investigational work and the soil fertility plot work at this institution. During the war Mr. Thrash served with the chemical warfare service. He is now pursuing work leading to a Ph. D. degree.

George Valley, assistant in extension work, was born at Revel, Esthonia, in 1887, and attended an agricultural college in Pskoff, Russia. The degrees of B. S. A. and M. Sc. were received from Ohio State in 1917 and 1919. Mr. Valley was assistant in soils and then took up the chemical analytical work for the extension department. Training is being pursued leading to a Ph. D. degree.

Robert B. Dustman was born near Youngstown, Ohio, in 1892, and reared on a farm. A B. S. in agriculture degree was received in 1915 at Ohio State. In 1916 he accepted the position of extension specialist in soils and crops at

the University of West Virginia and in 1919 returned to Ohio State in the capacity of assistant professor of soils extension service.

Earl E. Barnes was born in Erie County, Pa., in 1892, and received a B. S. in agriculture at Ohio State University in 1917. Mr. Barnes served as an assistant in agricultural chemistry and soils in 1917 and then accepted the position of county agent of Sandusky county, but in 1920 he returned to Ohio State as assistant professor of soil extension service.

Emory F. Almy was born on a farm near Greenwood, Neb., in 1895, and received the degrees of B. Sc. and M. Sc. at the University of Nebraska in 1916 and 1917. Before coming to Ohio State in 1920 he served as assistant of agricultural chemistry in the Nebraska University. He is now a graduate assistant of agricultural chemistry in this institution.

Miss Rachel Edgar of Coshocton, a graduate assistant of the department of agricultural chemistry and soils, graduated at Ohio State University in 1917, receiving a B. A. degree in 1918, B. Sc. in H. E. and in 1920 Miss Edgar received a M. Sc. degree.

Joseph L. Gayle was born at Morgantown, Ky., in 1897, and received a B. S. A. degree at the University of Kentucky in 1920, and now is a graduate assistant at Ohio State.

HOME ECONOMICS

(Continued from page 475)

gree in Home Economics. In 1908 she took some post-graduate work at Columbia and received a Bachelor of Science degree in Education. From the years 1907 until 1918 Miss Lanman acted as Director of Home Economics for the city of Columbus. Miss White, who had been the head of Home Eco-

Does an Agricultural Education Pay?

A recent survey of 1067 Ohio farms shows

Farm operator with high school education or less has average labor income of.....	\$502
Farm operator with a college education but other than agricultural has average labor income of	\$644
Farm operator attending an agricultural college has average labor income of.....	\$1422

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There is a strong demand for men scientifically trained
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SOILS**

either as teachers or in commercial positions. Courses in all
of these lines are offered by the College of Agriculture, Ohio
State University, Columbus, Ohio.

**Write to the Dean of the College of
Agriculture for further information.**

nomics since 1914, resigned in February, 1918, and the vacancy was filled by Miss Van Meter. Miss Lanman, who was at that time Assistant State Leader of Home Demonstration Agents in charge of urban work, was appointed for this responsible position in August, 1920.

The department is growing steadily, although we may say that it has not yet emerged from its experimental, undeveloped stage, but the changes which are being made are indicative of rapid progress.

PERSONNEL

Mrs. Walker, who is the mother of three children, is a product of our own University. She received her Bachelor of Science degree in 1913 and is now in charge of Textiles and Household Management.

Miss Elizabeth Shelow, who is in charge of Dietetics, spent two years at the army school of nursing at Chillingham, preparing young women for nursing. Miss Shelow attended the University of Cincinnati, received her A. B. from Randolph-Macon, her M. A. at Columbia, taught at Berea, Kentucky, and was in the Home Economics extension service.

Miss June Findlay is in charge of our successful cafeteria as well as advanced foods and institutional management. She is a western woman, having graduated from Missouri University.

Miss Grace Linder is instructor in High Schools.

Miss Alice M. Donnelly instructs the Juniors in the art of house decoration. She graduated from Columbia University and has had experience in teaching sanitation in Dayton and Columbus. She received her degree at the University of Illinois. In addition to her sanitation work she does extension

work through the correspondence school.

HORTICULTURAL DEPT.

(Continued from page 471)

this was the most important work it could be expected to continue to do. Great progress has been made along this line in the past few years and the future outlook for further development is very good. The work given in this department tries to cover every phase of fruit growing from the propagation of the trees and plants, the care of the plants, the harvesting of the fruit and finally the marketing of the fruit. Much of this work is under the careful supervision of Professor Paddock who has had great experience in this work. He received his degree from the Michigan Agricultural College, later receiving much practical experience at the Geneva Experiment Station before going to Colorado where he was actively engaged in promoting pomological interests, when fruit growing in that section was at its height.

Pomological work has for some time required the attention of two men. To provide sufficient instruction the services of Professor R. R. Jeffrey have been secured. Professor Jeffrey is also a graduate of the Fort Collins Agricultural College, taking his master's work at Ohio State. After his graduation he was actively engaged in work with the western fruit growers, afterwards taking up work with the extension department of the University of West Virginia, finally coming to Ohio State in the fall of 1920.

The Agricultural College through its Department of Horticulture is prepared to give a student four years of training that will enable him to be a practical and scientific Horticulturalist.



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Beginners' Classes organize Wednesday evening, June 6th. Get the very first lesson.

Private lessons afternoons or evenings.

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Tuition for beginners: Ladies, per term of 10 lessons, \$5.00; Gentlemen, \$6.00; Private Lessons, 5 lessons \$6.00.

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OAK ST. ACADEMY 827 Oak St.

Citz. 7195; Residence, Citz. 4431; Main 6189.

A strictly private place for Sorority and Fraternity dances.

PLANT INSTITUTE

(Continued from page 463)

or more of its members. In such cases it can serve as an administrative unit for carrying out these projects in a way that is impossible under departmental organization.

The officers of the Institute are: Executive committee, E. N. Transeau (Botany), chairman, Wendell Paddock (Horticulture), J. B. Park (Farm Crops), F. E. Bear (Soils), A. E. Waller (Botany) and C. L. Metcalf (Zoology; secretary, T. G. Phillips (Agricultural Chemistry.).

SHALL I GO TO COLLEGE?

(Continued from page 456)

to college movement that a lot of fellows do not realize until it is too late. College is the finest place in the world to develop the habit of loafing. The change from high school to college has an influence in this. There is a certain compulsion for getting high school work done. There is less of this in college. A person is placed more on his own resources and if not careful there is the danger of not waking up in time for eight o'clock classes and then there is the possibility of spending enjoyable evenings with a roommate or classmate with no regard for getting lessons. Often the classes are large and it is very easy to get by without lesson preparation. After all no person gets from college any more than he puts into it. When a person comes out of college after a four-year course apparently still "uneducated" the chances are nine to one that it's a reflection on his "application" and not on the college. Guard against the loafing habit, is good advice for incoming students. Shall I go to college? This is no question to answer by proxy. By all means

decide the question in your own mind. Are you financially able? If so, have you an appreciation of what college education means and a desire for what college gives? If not, you had better not go. If so, by all means go. The college wants you—the college needs you.

HOW FAR CAN PRODUCERS GO?

(Continued from page 458)

products generally. Either of these would require too elaborate an organization and moreover an organization remote from the producers, and hence hard to supervise and direct.

Market risks may, to a considerable extent, be shifted. Others can very well be borne by an organization if large enough to distribute occasional risks. Risks of price declines might, for example, be distributed over the entire membership. In certain types of organizations this would be feasible. Risks of physical hazard can in large measure be shifted cheaply—as fire insurance, for example. The moral risks of business, the risks of fraud, etc., would be hardest to handle.

To summarize, then, the farmers' organizations can hope to take over and perform successfully the simpler functions and those near at home. Furthermore, it is these functions that have thus far proven most profitable. As for the more distant and more complex functions, it will probably be a matter of wisdom to leave them to private initiative. Even in the former cases, the possible profits of private business may be dissipated through inefficient management instead of being transferred to the pockets of the farmers, when the latter take over the various marketing functions unless the best of judgment and skill be employed.

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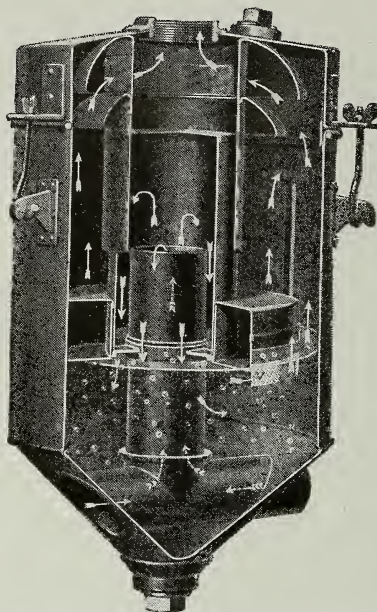
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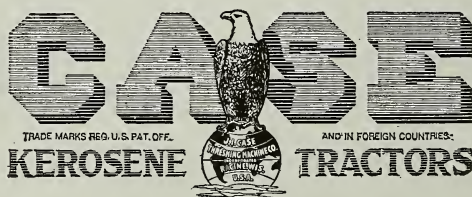
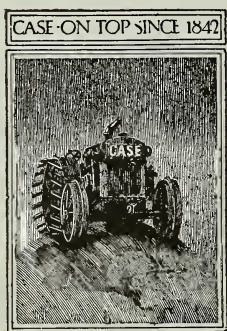
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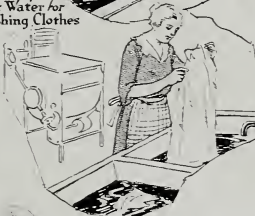


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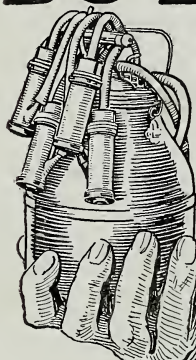
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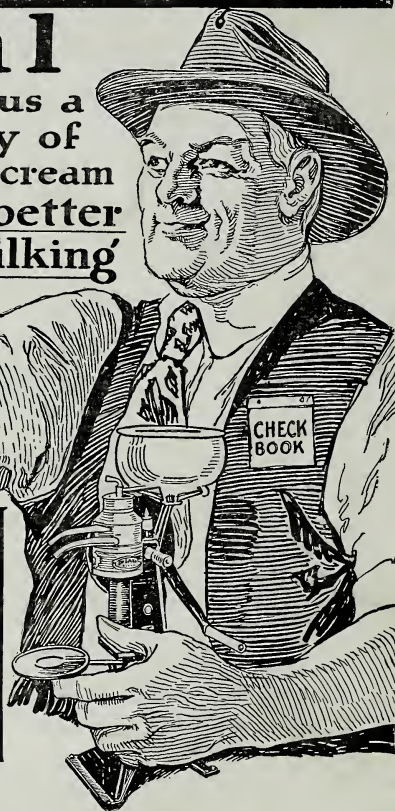
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